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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/135,413	08/14/98	FORBES	L 303.354US2

MM22/0709
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EXAMINER	
NGUYEN, V	
ART UNIT	PAPER NUMBER

2818
DATE MAILED:

07/09/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/

Applicant(s)

135,413

Forbes et al

Examiner

Group Art Unit

V. NGUYEN

2818

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on Amendment filed on 5/19/99.
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 19-21, 28-38, 43-50 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 28-38, 48, 50 is/are allowed.
- ☒ Claim(s) 43-45, 47, 49, 46, 19-21 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____ ☐ Interview Summary, PTO-413
- ☒ Notice of References Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

Art Unit: 2818

Claims 19-21, 28-38, and 43-50 are pending for examination. The amendment filed 5/19/99 has been entered of record.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43-45, 47, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ukai et al.

Ukai et al (re Fig. 6, col. 4) clearly teaches an silicon carbide layer (19) as claimed gate insulator between the floating gate and the channel. It would be obvious that charges are induced to migrate between the channel through this gate insulator to/from the floating gate. Thus, the claimed steps of "programming", "reading", and "erasing" are necessary, inherently suggested in Ukai et al as an obvious design choice.

Claims 19-21, 43-47, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugita et al (Jp. 08-255878).

Sugita et al (see Fig. 1, abstract) clearly teaches a Sic insulating film disposed between the floating gate and the substrate. It would be obvious that refreshing is done at regular interval since the abstract mentions the use of "appropriate refresh time" for such DRAM. Further, other

Art Unit: 2818

claimed features of "programing" by detecting the current flow through said insulator gate are considered as obvious design variation.

Any inquiry concerning this communication should be directed to Viet Nguyen at telephone number (703) 308-4897.



Viet Q. Nguyen
Primary Examiner

VN
Nguyen/dc
July 7, 1999